

CLAIMS

1. A document processing method for processing a document, comprising:

a document creation step of creating said document; and
a document editing step of editing said document on the basis of editing information specific to said document,

wherein said document creation step includes an original creation step that creates an original of said document, and an embedding step that embeds said editing information in said document, and

wherein said document editing step includes an extraction step that extracts the editing information embedded in said document, and a modifying step that modifies said document from the original state on the basis of said editing information.

2. The document processing method according to claim 1, wherein said embedding step is a step in which encoded data obtained by encoding said editing information is embedded in said document by means of electronic watermark.

3. The document processing method according to claim 1, wherein said embedding step is a step in which encoded data obtained by encoding said editing information is embedded in said document by means of bar code.

4. The document processing method according to any of claims 1 through 3, wherein said editing information includes decorative information that is required in order to decorate a specified region in said document, and said modifying step

includes a decorating step that decorates the specified region in said document on the basis of said decorative information.

5. The document processing method according to claim 4, wherein said decorative information includes information which indicates whether or not decoration is to be performed.

6. The document processing method according to claim 5, wherein said decorative information includes coordinate information indicating said specified region.

7. The document processing method according to any of claims 4 through 6, wherein said decorating step decorates the specified region of said document with a designated color.

8. The document processing method according to any of claims 4 through 6, wherein said decorating step decorates the specified region by half-tone dot meshing.

9. The document processing method according to any of claims 4 through 6, wherein said decorating step decorates the specified region by overwriting the specified region with an overwriting pattern.

10. The document processing method according to claim 9 further comprising a registration step of registering said overwriting pattern beforehand.

11. The document processing method according to any of claims 1 through 3, wherein said editing information includes replacement information that is required in order to replace the specified region of said documents with the replacement pattern, and said modifying step replaces the specified region

of said document with said replacement pattern on the basis of said replacement information.

12. The document processing method according to claim 11, wherein said replacement information includes coordinate information that indicates said specified region.

13. The document processing method according to claim 11 or claim 12, wherein said replacement information includes said replacement pattern.

14. The document processing method according to claim 11 or claim 12, wherein said replacement information includes information that designates said replacement pattern.

15. The document processing method according to any of claims 11 through 14, further comprising means for registering said replacement pattern beforehand.

16. The document processing method according to any of claims 1 through 3, wherein said editing information includes retouched-part information required in order to detect a retouched part added to said document, and said modifying step erases said retouched part added to said document on the basis of said retouched-part information.

17. The document processing method according to claim 16, wherein said retouched-part information includes a compressed image or reduced image of said document.

18. The document processing method according to claim 16, wherein said retouched-part information includes coordinate data indicating a blank region of said document.

19. The document processing method according to claim 16, wherein said retouched-part information includes a number of signals embedded in said document.

20. The document processing method according to any of claims 16 through 19, wherein said modifying step erases the retouched part added to said document by painting out said retouched part with a specified color.

21. The document processing method according to claim 20, wherein said modifying step erases the retouched part added to said document by painting out said retouched part with the specified color except for a straight line existing within said retouched part.

22. The document processing method according to claim 17, wherein said modifying step erases the retouched part added to said document by restoring an image of said document using said retouched-part information.

23. The document processing method according to any of claims 1 through 3, further comprising a step of removing said editing information from said document following said modifying step.

24. The document processing method according to any of claims 1 through 3, further comprising a re-embedding step of updating said editing information so as to reflect a result of the editing performed by said modifying step, and then embedding the updated editing information in said document following said modifying step.

25. A document processing system which processes a document, comprising:

document creation means for creating said document; and

document editing means for editing said document on the basis of editing information specific to said document,

wherein said document creation means includes original creation means for creating the original of said document, and embedding means for embedding said editing information in said document, and

wherein said document editing means includes extraction means for extracting the editing information embedded in said document, and modifying means for modifying said document from said original state on the basis of said editing information.

26. The document processing system according to claim 25, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using an electronic watermark.

27. The document processing system according to claim 25, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

28. The document processing system according to any of claims 25 through 27, wherein said system includes any one of an electronic copying machine, a scanner device and a facsimile device.

29. The document processing system according to any of claims 25 through 28, further comprising a server device which

holds either an overwriting pattern or replacement pattern used by said document editing means, or both, and which supplies the overwriting or replacement pattern to said document editing means via a network.

30. The document processing system according to claim 29, wherein said server device includes means for registering either said overwriting pattern or replacement pattern, or both.

31. A document creation method for creating a document that is to be edited on the basis of editing information, comprising:

an original creation step of creating an original of said document; and

an embedding step of embedding said editing information in said document.

32. The document creation method according to claim 31, wherein said embedding step embeds encoded data, which is obtained by encoding said editing information, in said document using an electronic watermark.

33. The document creation method according to claim 31, wherein said embedding step embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

34. The document creation method according to any of claims 31 through 33, wherein said editing information includes decorative information that is required in order to decorate a specified region of said document.

35. The document creation method according to claim 34, wherein said decorative information includes information that indicates whether or not decoration is to be performed.

36. The document creation method according to claim 35, wherein said decorative information includes coordinate information indicting said specified region.

37. The document creation method according to any of claims 31 through 33, wherein said editing information includes replacement information that is required in order to replace the specified region of said document with a replacement pattern.

38. The document creation method according to claim 37, wherein said replacement information includes coordinate information that indicates said specified region.

39. The document creation method according to claim 37 or 38, wherein said replacement information includes said replacement pattern.

40. The document creation method according to claim 37 or 38, wherein said replacement information includes information that designates said replacement pattern.

41. The document creation method according to any of claims 37 through 39, wherein said editing information includes retouched-part information that is required in order to detect a retouched part added to said document.

42. The document creation method according to claim 41, wherein said retouched-part information includes a compressed image or reduced image for said document.

43. The document creation method according to claim 41, wherein said retouched-part information includes coordinate data indicating a blank region in said document.

44. The document creation method according to claim 41, wherein said retouched-part information includes a number of signals embedded in said document.

45. A document creation device for creating a document that is to be edited on the basis of editing information, comprising:

original creation means for creating an original of said document; and

embedding means for embedding said editing information in said document.

46. The document creation device according to claim 45, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using an electronic watermark.

47. The document creation device according to claim 45, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

48. The document creation device according to claim 45, wherein said device includes a personal computer.

49. A document editing method for editing a document on the basis of editing information embedded by an embedding step, comprising:

an extraction step of extracting the editing information embedded in said document; and

a modifying step of modifying said document from the original state on the basis of said editing information.

50. The document editing method according to claim 49, wherein said embedding step embeds encoded data, which is obtained by encoding said editing information, in said document using an electronic watermark.

51. The document editing method according to claim 49, wherein said embedding step embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

52. The document editing method according to any of claims 49 through 51, wherein said editing information includes decorative information that is necessary in order to decorate a specified region in said document, and said modifying step includes a decorating step that decorates the specified region in said document on the basis of said decorative information.

53. The document editing method according to claim 52, wherein said decorative information includes information that designates whether or not decoration is to be performed.

54. The document editing method according to claim 53, wherein said decorative information includes coordinate information that indicates said specified region.

55. The document editing method according to any of claims 52 through 54, wherein said decorating step decorates a

specified region of said document by painting said region with a designated color.

56. The document editing method according to any of claims 52 through 54, wherein said decorating step decorates the specified region by half-tone dot meshing.

57. The document editing method according to any of claims 52 through 54, wherein said decorating step decorates the specified region by overwriting the specified region with an overwriting pattern.

58. The document editing method according to claim 57, further comprising a registration step which registers said overwriting pattern beforehand.

59. The document editing method according to any of claims 49 through 51, wherein said editing information includes replacement information that is necessary in order to replace the specified region of said document with the replacement pattern, and said modifying step replaces the specified region of said document with said replacement pattern on the basis of said replacement information.

60. The document editing method according to claim 59, wherein said replacement information includes coordinate information indicating said specified region.

61. The document editing method according to claim 59 or 60, wherein replacement information includes said replacement pattern.

62. The document editing method according to claim 59 or 60, wherein replacement information includes information that designates said replacement pattern.

63. The document editing method according to any of claims 59 through 62, further comprising means for registering said replacement pattern beforehand.

64. The document editing method according to any of claims 49 through 51, wherein said editing information includes retouched-part information that is necessary in order to detect a retouched part added to said document, and said modifying step erases the retouched part added to said document on the basis of said retouched-part information.

65. The document editing method according to claim 64, wherein said retouched-part information includes a compressed image or reduced image of said document.

66. The document editing method according to claim 64, wherein said retouched-part information includes coordinate data that indicates a blank region in said document.

67. The document editing method according to claim 64, wherein said retouched-part information includes a number of signals embedded in said document.

68. The document editing method according to any of claims 64 through 67, wherein said modifying step erases the retouched part added to said document by painting out said retouched part with a specified color.

69. The document editing method according to claim 68, wherein said modifying step erases the retouched part added to

the said document by painting out said retouched part with the specified color except for a straight line located inside said retouched part.

70. The document editing method according to claim 65, wherein said modifying step erases the retouched part added to said document by restoring the image of said document using said retouched-part information.

71. The document editing method according to any of claims 49 through 51, further comprising a step of erasing said editing information from said document following said modifying step.

72. The document editing method according to any of claims 49 through 51, further comprising a re-embedding step of updating said editing information so as to reflect a result of the editing performed by said modifying step, and then embedding the updated editing information in said document following said modifying step.

73. A document editing device for editing a document on the basis of editing information embedded by embedding means, comprising:

extraction means for extracting the editing information embedded in said document; and

modifying means for modifying said document from the original state on the basis of said editing information.

74. The document editing device according to claim 73, wherein said embedding means embeds encoded data, which is

obtained by encoding said editing information, in said document using an electronic watermark.

75. The document editing device according to claim 73, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

76. The document editing device according to claim 73, wherein said device includes any one of an electronic copying machine, a scanner device and a facsimile device.

77. A document of which original is to be edited on the basis of editing information, wherein the original is converted into the document of paper or electronic form, and said editing information is embedded in the document by embedding means.

78. The document according to claim 77, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using an electronic watermark.

79. The document according to claim 77, wherein said embedding means embeds encoded data, which is obtained by encoding said editing information, in said document using a bar code.

80. The document according to any of claims 77 through 79, wherein said editing information includes at least one of decorative information that is necessary in order to decorate a specified region in said document, replacement information that is necessary in order to replace the specified region of

said document with a replacement pattern, and retouched-part information that is necessary in order to detect the retouched part added to said document.